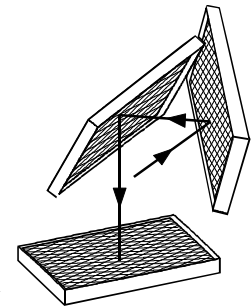


HH03-S1337 Three-element reflection photodetectors



▲ three element detector with protective cap



principle beam journey ►

This device is designed on the basis of quality photodiodes. Three photodiodes are rotated by angle 45° along each normal axis minimizing the distances between centres of diodes. As the result, the photodiodes are arranged in polarization-independent configuration to reduce back-reflection from the device more than 100 times as compared to a one-element photodetector. The active area forms 50% of a single photodiode used in the detector. Typical applications are in the measurements of optical power at high level of accuracy in wide spectral range.

Parameter	Detector Model HH03-S1337	Notes
Active area [mm ²]	54	
Spectral range [nm]	360-950	
Spectral responsivity [mA/mW]	0,35-0,7	Depends on wavelength, almost linear up to 950 nm
Quantum efficiency	>0,97	Incl reflectance
Calibration relative uncertainty [%]	0,5	Responsivity calibration
Maximum optical power density [mW/cm ²]	5	
Full field of view [°]*	15	
Optical path length in the device [mm]*	79	Distance from the first reflection to the last reflection - 45 mm
Maximum back-reflection [% of incoming beam]**	3	@360 nm
Minimum back-reflection [% of incoming beam]**	0,2	@950 nm
Spatial uniformity of the responsivity [%]	±0,1	Scanned @ 632,8nm
Dimensions (approx):*		
Diameter [mm]	60	Dimensions and type of electrical connector upon customer specifications
Length [mm]	48	
Weight (approx)[kg]	0,2	

*The given values are illustrative and may depend on the customer specified features of photodetector

**The values are given for detector modeled as a photodiode with antireflection coating effective thickness 30 nm